

In the Claims

For the convenience of the Examiner, all pending claims are set forth below, whether or not an amendment is made. Please amend the claims as follows:

1. **(Currently Amended)** A system for application development, the system comprising:

a plurality of programming entities comprising:

a run-time container operable to execute a workflow, the workflow representing an application and comprising a plurality of workflow steps, each workflow step comprising a particular operation of the application, an interactive voice response unit comprising the run-time container, the workflow being operable to direct the operation of the interactive voice response unit; and

a design-time container operable to edit the workflow; and

a plurality of contracts, a contract specifying an interaction between a workflow step and a programming entity, the interaction comprising a service that the programming entity provides for the workflow step when the workflow step is executed, the workflow step and the contract operable to be used for a next workflow, the plurality of contracts comprising:

a first contract specifying that the design-time container is to retrieve input data for a first workflow step when the first workflow step is executed; and

a second contract specifying that the run-time container is to play a message in response to a triggering event for a second workflow step when the second workflow step is executed;

the design-time container further operable to retrieve input data according to the first contract; and

the run-time container further operable to play the message in response to the triggering event according to the first contract.

2. **(Canceled)**

3. **(Original)** The system of Claim 1, wherein the contract specifies a service provided by the run-time container to the workflow.

4. **(Original)** The system of Claim 1 wherein the contract specifies a service provided by the design-time container to the workflow.

5. **(Original)** The system of Claim 1, wherein:
the workflow comprises a workflow step, the workflow step operable to be used in a plurality of workflows;
the workflow step comprises a variable;
a workflow task of the workflow provides a value; and
the contract associates the variable with the value.

6. **(Original)** The system of Claim 1, wherein:
the run-time container comprises a workflow subsystem operable to retrieve an execution context for the workflow; and
the contract specifies the execution context.

7. **(Previously Presented)** The system of Claim 1, wherein:
the workflow comprises a workflow step operable to direct the interactive voice response unit to play a message specified in a message variable;
a workflow task of the workflow provides a message value corresponding to the message; and
the contract associates the message value with the message variable.

8. **(Previously Presented)** The system of Claim 1, wherein:
the workflow comprises a workflow step operable to direct the interactive voice response unit to retrieve data specified in a data variable;
a workflow task of the workflow provides a data value corresponding to the data; and
the contract associates the data value with the data variable.

9. **(Currently Amended)** A method for application development, the method comprising:

defining a plurality of programming entities comprising:

a run-time container operable to execute a workflow, the workflow representing an application and comprising a plurality of workflow steps, each workflow step comprising a particular operation of the application;

directing the operation of an interactive voice response unit using the workflow, the interactive voice response unit comprising the run-time container; and

a design-time container operable to edit the workflow; and

defining a plurality of contracts, a contract specifying an interaction between a workflow step and a programming entity, the interaction comprising a service that the programming entity provides for the workflow step when the workflow step is executed, the workflow step and the contract operable to be used for a next workflow, the plurality of contracts comprising:

a first contract specifying that the design-time container is to retrieve input data for a first workflow step when the first workflow step is executed; and

a second contract specifying that the run-time container is to play a message in response to a triggering event for a second workflow step when the second workflow step is executed;

the design-time container further operable to retrieve input data according to the first contract; and

the run-time container further operable to play the message in response to the triggering event according to the first contract.

10. **(Canceled)**

11. **(Original)** The method of Claim 9, further comprising:

defining the contract specifying a service provided by the run-time container to the workflow; and

executing the workflow using the run-time container.

12. **(Original)** The method of Claim 9, further comprising:
defining the contract specifying a service provided by the design-time container to the workflow; and
editing the workflow using the design-time container.

13. **(Original)** The method of Claim 9, further comprising defining the contract associating a variable with a value, a workflow task providing the value and a workflow step, the workflow step operable to be used in a plurality of workflows and comprising the variable.

14. **(Original)** The method of Claim 9, further comprising:
defining the contract specifying an execution context for the workflow; and
retrieving the execution context using the run-time container.

15. **(Previously Presented)** The method of Claim 9, further comprising:
defining the workflow comprising a workflow step directing the interactive voice response unit to play a message specified in a message variable, a workflow task providing a message value corresponding to the message;
defining the contract associating the message value with the message variable; and
playing the message.

16. **(Previously Presented)** The method of Claim 9, further comprising:
defining the workflow comprising a workflow step directing the interactive voice response unit to retrieve data specified in a data variable, a workflow task providing a data value corresponding to the data;
defining the contract associating the data value with the data variable; and
retrieving the data.

17. **(Currently Amended)** Application development software embodied in a computer-readable medium and operable to perform the following:

defining a plurality of programming entities comprising:

a run-time container operable to execute a workflow, the workflow representing an application and comprising a plurality of workflow steps, each workflow step comprising a particular operation of the application; and

a design-time container operable to edit the workflow;

directing the operation of an interactive voice response unit using the workflow, the interactive voice response unit comprising the run-time container; and

defining a plurality of contracts, a contract specifying an interaction between a workflow step and a programming entity, the interaction comprising a service that the programming entity provides for the workflow step when the workflow step is executed, the workflow step and the contract operable to be used for a next workflow, the plurality of contracts comprising:

a first contract specifying that the design-time container is to retrieve input data for a first workflow step when the first workflow step is executed; and

a second contract specifying that the run-time container is to play a message in response to a triggering event for a second workflow step when the second workflow step is executed;

the design-time container further operable to retrieve input data according to the first contract; and

the run-time container further operable to play the message in response to the triggering event according to the first contract.

18. **(Canceled)**

19. **(Original)** The application development software of Claim 17, further operable to perform:

defining the contract specifying a service provided by the run-time container to the workflow; and

executing the workflow using the run-time container.

20. **(Original)** The application development software of Claim 17, further operable to perform:

defining the contract specifying a service provided by the design-time container to the workflow; and

editing the workflow using the design-time container.

21. **(Original)** The application development software of Claim 17, further operable to perform defining the contract associating a variable with a value, a workflow task providing the value and a workflow step, the workflow step operable to be used in a plurality of workflows and comprising the variable.

22. **(Original)** The application development software of Claim 17, further operable to perform:

defining the contract specifying an execution context for the workflow; and

retrieving the execution context using the run-time container.

23. **(Previously Presented)** The application development software of Claim 17, further operable to perform:

defining the workflow comprising a workflow step directing the interactive voice response unit to play a message specified in a message variable, a workflow task providing a message value corresponding to the message;

defining the contract associating the message value with the message variable; and
playing the message.

24. **(Previously Presented)** The application development software of Claim 17, further operable to perform:

defining the workflow comprising a workflow step directing the interactive voice response unit to retrieve data specified in a data variable, a workflow task providing a data value corresponding to the data;

defining the contract associating the data value with the data variable; and
retrieving the data.

25. **(Currently Amended)** A system for application development, the system comprising:

means for defining a plurality of programming entities comprising:

a run-time container operable to execute a workflow, the workflow representing an application and comprising a plurality of workflow steps, each workflow step representing a particular operation of an application being developed; and

a design-time container operable to edit the workflow;

means for directing the operation of an interactive voice response unit using the workflow, the interactive voice response unit comprising the run-time container; and

means for defining a plurality of contracts, a contract specifying an interaction between a workflow step and a programming entity, the interaction comprising a service that the programming entity provides for the workflow step when the workflow step is executed, the workflow step and the contract operable to be used for a next workflow, the plurality of contracts comprising:

a first contract specifying that the design-time container is to retrieve input data for a first workflow step when the first workflow step is executed; and

a second contract specifying that the run-time container is to play a message in response to a triggering event for a second workflow step when the second workflow step is executed;

the design-time container further operable to retrieve input data according to the first contract; and

the run-time container further operable to play the message in response to the triggering event according to the first contract.

26. **(Canceled)**

27. **(Original)** The system of Claim 25, further comprising:

means for defining the contract specifying a service provided by the run-time container to the workflow; and

means for executing the workflow using the run-time container.

28. **(Original)** The system of Claim 25, further comprising:
means for defining the contract specifying a service provided by the design-time container to the workflow; and
means for editing the workflow using the design-time container.

29. **(Original)** The system of Claim 25, further comprising means for defining the contract associating a variable with a value, a workflow task providing the value and a workflow step, the workflow step operable to be used in a plurality of workflows and comprising the variable.

30. **(Original)** The system of Claim 25, further comprising:
means for defining the contract specifying an execution context for the workflow; and
means for retrieving the execution context using the run-time container.

31. **(Previously Presented)** The system of Claim 25, further comprising:
means for defining the workflow comprising a workflow step directing the interactive voice response unit to play a message specified in a message variable, a workflow task providing a message value corresponding to the message;
means for defining the contract associating the message value with the message variable; and
means for playing the message.

32. **(Previously Presented)** The system of Claim 25, further comprising:
means for defining the workflow comprising a workflow step directing the interactive voice response unit to retrieve data specified in a data variable, a workflow task providing a data value corresponding to the data;
means for defining the contract associating the data value with the data variable; and
means for retrieving the data.

33. **(Currently Amended)** A system for application development, the system comprising:

a plurality of programming entities comprising:

a workflow step operable to:

direct an interactive voice response unit to play a message specified in a message variable;

direct the interactive voice response unit to retrieve data specified in a data variable;

a workflow representing an application and comprising the workflow step, the workflow step comprising a particular operation of the application;

a workflow task providing a message value corresponding to the message and a data value corresponding to the data;

a run-time container operable to execute the workflow;

a design-time container operable to edit the workflow;

a plurality of contracts, a contract associating:

the message value with the message variable; and

the data value with the data variable, the contract specifying an interaction between the workflow step and the run-time container, the interaction comprising a service that the run-time container provides for the workflow step when the workflow step is executed, the workflow step and the contract operable to be used for a next workflow, the plurality of contracts comprising:

a first contract specifying that the design-time container is to retrieve input data for a first workflow step when the first workflow step is executed; and

a second contract specifying that the run-time container is to play a message in response to a triggering event for a second workflow step when the second workflow step is executed;

the design-time container further operable to retrieve input data according to the first contract; and

the run-time container further operable to play the message in response to the triggering event according to the first contract.